

Reading Selections of College Reading 3

CHAPTER 1 : RACE AND ETHNICITY

Reading Assignment 1 (Studying for Breadth and Depth)

Reading Selection 1 (P. 6)

By John Avery

Studying in American Colleges and Universities

when attending a college or university in the U.S., students usually major in one subject area and take other classes which meet their “distribution requirements.” This means they have to take a lot of classes in one main or academic “major” subject and many other classes in different areas of study such as science, math, humanities, English, and the social sciences. The idea behind this system is for students' to develop breadth and depth. The breadth comes from having some education in a number of areas and the depth comes from concentrating, or majoring, in just one. Each college or university has its own requirements, but most students are required to take some courses in the social sciences. To fulfill the distribution requirement for social science, students may take a sociology course.

What Is Sociology?

Sociology is one of the main social sciences. Anthropology, economics, geography, political science, and psychology are other social sciences. In the textbook *Introduction to Sociology*, authors Ethel Wood and Judith Lloyd Yero explain sociology by giving us a quotation and some definitions.

Here are some of the authors' key points.

- According to Auguste Comte, a Frenchman who was the first to use the term sociology (in 1824), sociology means “the study of society.”
- Sociologists... study social behavior in human groups and look for patterns.” (p. 2)
- Sociologists look at how social relationships affect group behavior. (p. 2)

The subject of sociology covers a large number of topics, such as race and ethnicity. In this chapter, you will read about these topics and respond by discussing the subject in your class. If you attend a college or university and major in sociology, you will acquire a great deal more depth in this subject. To major in a subject means you will take a lot of classes in that area so you will have more knowledge about it than you will about other subjects.

For now, you will read about two topics in sociology and gain some breadth of understanding about an important field of study.

Reading Assignment 2 (Understanding Race and Ethnicity)

Reading Selection 2 (P. 14)

Racial and Ethnic Minorities

The oldest human records speak of minorities and raise the question of how they should be treated. There were minorities in ancient Egypt and Babylon, and the Hebrew Scriptures furnish complete descriptions of numerous minority groups. How do sociologists view this aspect of human society?

Dominant Groups

In a society, the group of people that has the power—whose members include the rulers, lawgivers, and religious, military, and educational leaders—is the dominant group. A nation's history identifies its dominant group.

Example:

In Spain, the dominant group is the group whose power dates from the time of Ferdinand and Isabella and their European ancestors. These 15th-century rulers expelled and persecuted Jews and Muslims and established a white, Roman Catholic nation with Castilian Spanish as its official language.

Minority Groups

Groups in a society that have been overpowered by the dominant group—such as American Indians in the United States—or have come in after the dominant group's power is established— immigrants in the United States other than the English—make up minority groups.

The dominant group establishes the values and norms of the society. It creates a social structure that operates in its favor. Minority groups have to live by the rules set by the dominant group, which usually means they don't have the same privileges and must accept inferior housing and jobs and are often treated differently by the justice system.

A common misconception about minority groups is that they are always numerically smaller than the majority group in a society. That may be true, but a minority group is better defined as any recognizable group in a society that suffers some disadvantage due to prejudice or discrimination by the dominant group. In some nations of the world, religion distinguishes a minority group. Major minority groups in the United States are identified by race and ethnicity.

Racial Groups

The concept of race is based on observable physical differences among people resulting from inherited biological traits. It divides people into groups based on skin color and ancestral origin. Traditionally, English-speaking people have talked in terms of three races with their origins from three of the world's continents:

1. Africa.
2. Asia.
3. Europe.

Centuries of racial mixing—through migration, exploration, and invasion—have resulted in a great intermingling of races. We cannot accurately categorize individuals as “black” or “white.” Sociologists are not interested in the biology of race. They are interested in race as it relates to the social structure.

In order to make the gathering of data uniform, sociologists rely on the categories of race that the Census Bureau uses or on the definition of race that individuals give themselves or others.

If you read a U.S. Census Bureau report, you might find data divided among the following five groups:

1. White, not Hispanic.
2. Black.
3. Hispanic.
4. Asian and Pacific Islander.
5. American Indian, Eskimo, and Aleut.

In actual practice, the Census Bureau invites people to check one of dozens of categories to identify their race. In the 2000 census, there were about 60 different racial combinations recognized for non-Hispanics and another 60 for Hispanics. Census forms were available in English, Spanish, Chinese, Korean, Vietnamese, and Tagalog, the language of the Philippines. Guides for the census takers were written in 49 languages. As you can see, race in the United States is a matter of culture, and is not easy to define.

In the United States, about 30 percent of the population is non-white. African Americans make up the largest racial minority group. However, in the near future the Hispanic population is expected to outnumber the black population. If current trends continue, by 2050 almost half of the U.S. population will be non-white.

Ethnic Groups

While racial groups are based on physical characteristics, ethnic groups are based on such cultural factors as national origin, religion, language, norms, and values. As with the concept of racial groups, there is great variety within broad ethnic categories.

Examples:

Asian Americans comprise a minority group that includes many different national groups. Japanese Americans not only speak a different language from Korean Americans, but they have different customs and political and social beliefs as well.

Jews, although they are racially diverse and live in many countries around the world, are bound together by their common religious beliefs, customs, and values.

Within the United States, nationality groups often settle in the same neighborhoods and retain separate identities. Poles, Ukrainians, Mexicans, Puerto Ricans, Italians, and Germans who live in the United States may vary in the strength of their ethnic identities, but national heritage often sets such groups apart.

Ethnic groups retain their separate identities as long as they pass their cultural beliefs and practices from generation to generation. A common ancestry is usually—but not necessarily—shared by group members. In groups with strong ethnic identities, members are encouraged to form friendships with and to marry only others of the same ethnicity. In fact, the term ethnic comes from the Greek word *ethnos*, meaning “people” or “nation.” The special feeling of “my people” sets the group apart from others and discourages members from forming close ties with “outsiders.”

Characteristics of Minority Groups

Sociologists identify minority groups by four characteristics, in addition to their receiving unequal treatment in society:

- a. Shared Physical or Cultural Characteristics.** Members of a minority group are identified by a wide array of physical and/or cultural differences, including race, religion, ancestry, language, and customs. The foods served, the celebrations observed, the ways in which people choose their spouses—these are often similar among members of an ethnic group.
- b. Ascribed Statuses.** Membership in a minority (or dominant) group is not voluntary. People are born into the group; race and ethnicity are ascribed statuses.
- c. Group Solidarity.** When a group is the object of long-term prejudice or discrimination, the feeling of “us *versus* them” often becomes intense. Members of ethnic groups stick together when they feel under attack from the dominant group or from other minority groups.
- d. Endogamy.** Members of a minority generally marry others from the same group, a practice known as endogamy. Two factors account for this: (1) the unwillingness of members of the dominant group to marry into, and thus in some way join, a lower level of society; and (2) a minority group’s sense of solidarity, which encourages marriages within the group.

Patterns of Repression and Response

Societies vary in the degree to which racial and ethnic minority groups participate in mainstream society. Minorities respond to their situation with behaviors ranging from submission and acceptance to agitation and violence. In history, repression of minorities by the dominant group has taken four forms:

a. Forced Removal—in which a minority population is transferred to a separate geographic location.

Example: The Trail of Tears removal of the Cherokee from Georgia to Oklahoma in 1838.

b. Segregation—in which a minority group is kept separate from the dominant population in the same location. It can be *de jure*, based on laws, or *de facto*, based on informal norms.

Example: Earlier laws in the South that kept blacks and whites from attending the same schools (*de jure*); the discriminatory practice of sellers, real estate agents, and mortgage lenders in the North that kept African Americans from living in neighborhoods with whites (*de facto*).

c. Subjugation—maintaining control over the minority population by force.

Example: The Israeli use of curfew laws and troops with guns and tanks to punish the Palestinian minority following acts of terrorism by militant individuals.

d. Annihilation—the destruction of a targeted minority population. Also called genocide.

Example: In Rwanda, the efforts of the Hutu rebels against the Tutsis. In April 1994, hundreds of thousands of Tutsis were murdered by Hutu rebels in the central African country of Rwanda in an attempt to annihilate the Tutsis.

Minority groups have often responded to these negative forms of treatment in three ways:

a. Submission and Acceptance—deferring to members of the dominant culture and learning ways of “getting along.”

b. Withdrawal—avoiding contact with the dominant culture through self-segregation.

c. Agitation and Violence—protesting minority status and unequal treatment or organizing a revolt against the dominant group.

Assimilation—Melting Pot or Cultural Salad

Society in the United States has tried to encourage most of its immigrant minority groups, particularly those that are white, to join (assimilate) mainstream society. Historically, it has done this in two ways, described by figures of speech:

a. The Melting Pot (from the container in which metals are melted to make such alloys as steel) is a term for American society that suggests the people of different nations have given up their distinctive ways to become members of the dominant culture through assimilation, the process by which people become like others around them, taking their norms on as their own.

b. The Salad Bowl refers to the idea of cultural pluralism in which mainstream society acknowledges there is value in preserving the uniqueness of the subcultures that comprise it. Minority groups are encouraged to maintain unique identities within the larger culture, and society accepts diversity as part of its own definition.

Reading Assignment 2 (Life as an Alien)

Reading Selection 3 (P. 37)

By Men Nana-Ama Danquah

The immigrant experience frequently brings with it a “half and half” feeling of not fully belonging to either the culture of the new country or the old. With one foot in each culture, immigrants are distanced from people that they grew up with. The process of adjusting completely to their new lives is often slow and difficult. In the following selection written in the 1990s, Meri Nana-Ama Danquah, an African immigrant from Ghana who was living in Los Angeles, explores her life as an “alien” and contemplates the emotional effects of living in the United States for many years without becoming a citizen.

I don't know where I come from. When people ask me, I have to stop and wonder what it is they really want to know about me. Do they want to know where I was born, where I grew up, where I have lived as an adult, where I live now? It troubles me to be so scattered, so fragmented, so far removed from a center. I am all and I am nothing. At the same time. Once, a long time ago, when I believed that answers were as easy as smiles, someone told me that home is where the heart is. Perhaps this is true. Love has always been a magnet. It is half the sky, the raggedy part that needs to be held up and saved. It is a name as long as history with enough vowels for each of its children to claim. It is the memory of wearing open-toed shoes in December.

Love is a plate of steamed white rice and pig's-feet stew. As a child, this was my favorite meal. I would sit at the dining table, my legs swinging back and forth, and hum as I scooped the food into my mouth with my hand. I always ate the rice first, saving the meat in a towering heap on the side for last. Then I would greedily dig into the pile of pork and choose the largest piece. When my teeth had grazed all the flesh off the bone, I would hold the pork to my lips and suck it dry of its juice. I would bite down hard until it broke in half and I could touch the marrow with the tip of my tongue. Right then, right there, I knew my world was complete.

Several years ago, in what I can only assume was a temporary loss of sanity; I decided to become a vegetarian. Swept into the New Age organic, fat-free health obsessions of Los Angeles, the city in which I live, I vowed to never again eat another piece of meat. Not fish, not chicken, and certainly never pork. It felt strange to not eat meat anymore; nothing I took in seemed to fill me. “You'll get used to the change,” a friend promised. We were at an Indian restaurant celebrating my newfound diet. When my dinner arrived, a gentle nostalgia descended upon me. The food—a creamy stew of chopped spinach—resembled kontumare, a Ghanaian dish I very much enjoy. Except there was no meat. And that absence left me feeling so cheated out of an integral part of the experience I was having that before returning to my apartment I stopped by an uncle's house and begged the leftover remains of his curried goat dinner.

My attempt to be an herbivore was but one in a long list of numerous attempts I have made to create or “try out” a new identity. In my twenty-four years of living in America, I have adapted to all sorts of changes. I have housed many identities inside the one person I presently call myself, a person I know well enough to admit that I don't know at all. Like a chameleon, I am ever changing, able to blend without detection into the colors and textures of my surroundings, a skill developed out of a need to belong, a longing to be claimed. Once, home was a place, perhaps the only place, where I imagined that I really did belong, where I thought myself whole. That is not so anymore, at least not in the home that I grew up believing was mine. That word, “home,” and all it represents, has shifted in meaning too many times.

From the age of six, when I left Ghana and arrived in Washington, D.C., to be with my mother who had been in the States already for three years, it was quite clear that someday we

would return. There was always talk of going back. There were always plans being made, sentences being spoken that began with words like "When I go home. . ." Even after my father joined us, America was just a place of temporary existence, not home. And in consideration of our imminent departure, assimilation was frowned upon. My parents tried to fan the flames of our culture within me, in hopes that they would grow into a raging fire and burn fully any desire I had to become an American.

The split between the me who lived in [our] apartment and the me who had to learn how to survive outside it was immediate. It had to be. Initially, I suppose that I viewed that split simply as an external divide, straight and pronounced, like the threshold of our front door, marking the point of separation between two distinct realities. On one side was America, on the other was Ghana. And I didn't know how to bring them together, how to make one make sense *to*, let alone *in*, the other.

Newness is easy to detect, especially with immigrants. Everything about you is a dead giveaway. And people constantly watch and stare through the scrutinizing lens of curiosity. That was a foreign thing for me, being questioned, being eyed. From top to bottom, the eyes would travel. From top to bottom, taking a silent inventory of the perceived differences: the way I wore my hair wrapped with thread as thick as an undiluted accent, or in small braids intricately woven like a basket atop my head; my clothing, a swirl of bright, festive colors dyed on fabric much too thin for the shivery East Coast climate.

Being black made the transition from Africa to America extremely difficult because it introduced another complex series of boundaries. The one place where I found acceptance was in the company of other immigrants. Together, we concentrated on our similarities, not our differences, because our differences were our similarities. Still, I secretly envied the other foreign kids because I believed that their immigrant experience was somehow more authentic than mine. Unlike me, they were not caught in the racial battlefield of black and white, their ethnicity was visible. Mine invariably faded to black. They spoke languages that were identifiable. Everybody's heard of Spanish, Korean, Chinese, even Arabic. The few people who had heard of Ga and Twi colonially labeled them dialects, not languages.

When I [lost] my accent, I suddenly internalized the divide, blurred the lines between continents and allegiances. There was no middle ground anymore, no threshold, no point of distinction between one reality and another. I had strayed so far away from the place I called my home that I could not find my way back. From that point on, every culture I made contact with seeped in to create one fluid geography within me. Yet as much as I imagined that I could claim them all, I still belonged to none of them. I didn't even belong to the one in which my family resided, the one that had once provided me the safety of a home base. Like everywhere else, I became the "other" there, unable to fully expand and unfold the many selves I now had, unable to ever again feel completely whole.

As the result of a recent incident with my six-year-old daughter, Korama, I began, for the first time, to accept myself, my history of traversal. I began to create a context for the cross-cultural life that I have led.

For whatever reason, in the course of one of Korama's kindergarten conversations, she let it be known that my favorite television program is *The X-Files*. That afternoon when I picked her up from school, she told me about the disclosure. "Oh. Okay, Korama," I said. "Mo-o-m," she whined, "it's not okay. They said you like that show because you're an alien. I tried to tell them, that you weren't, but Hugo said I was wrong. He said that you're not from America, and that everyone who's not from here is an alien. Is that true? Are you an alien?" She stared at my head as if antennae would pop out at any time. I wasn't sure how to reply, but with the shrewdness that parenthood teaches you, I tried to figure out a way to answer her question without volunteering too much information that might, ultimately, confuse her. While I was mulling it

over, she and I walked side by side in silence. With each step, I felt a distance growing between us.

For a moment, her stare was as disempowering as those of the American children whom I had encountered as a child, her questions as offensive. I wanted to arm myself against the pain of being reminded that I was “other.” I wanted to beg that little girl before me to try, to just try to accept, if not love—me for who I was, the way I was—no matter how different that seemed from the way she was. But I knew I didn’t have to, because she already did. “Yes,” I finally said to Korama, “I am.” I explained to her that in addition to creatures from outer space, the word “alien” was used to refer to human beings from other countries. I expected her to be a bit confused, but she didn’t appear to be. She nodded, reached out for my hand as we approached the Street we had to cross to get to our apartment, and the distance disappeared.

When I tucked her into bed that evening, she raised the subject again. “Mom, will you always be an alien?” she asked. And, again, I tried to find a straightforward, uncomplicated response, this time to a question I had been trying unsuccessfully to answer for over twenty years. “No,” I told her. “Not if I become an American.” Up until the second I said that, I had never so much as considered becoming a United States citizen. In the belief that I would one day return to the country of my birth, I had never made a commitment to being in the country where I have spent the better part of my life. I had always thought of naturalization as nothing more than a piece of paper one received after passing a test. If that’s the case, I could live or die without that slip of paper, that change of nationality. It wouldn’t make a difference one way or the other. I have lived my life as an alien, an outsider trying to find a way and a place to fit in. And it is only through that experience that I have come to think of myself not as a citizen of one country or another but, rather, of an entire world.

CHAPTER 2 : STRESS AND ADAPTATION

Reading Assignment 1 (The Body's Response to Stress-The General Adaptation Syndrome)

Reading Selection 1 (P. 63)

Much of what we know about the body’s response to stress is the result of pioneering research by Hans Selye (1907—1982), the famed stress researcher known affectionately as “Dr. Stress.” Selye found that the body responds in a similar manner to various stressors—cold, noise, infectious agents, pressures on the job, or mental stress in the form of worry or anxiety. He recognized that specific stressors, such as an invading virus, do elicit specific reactions in the body. But layered over these specific responses is a more general response to stress, which he called the general adaptation syndrome (GAS) (also called the stress response). The general adaptation syndrome consists of three stages, each of which we consider below.

Alarm Stage

The alarm stage is the body’s first stage of response to a stressor, during which its defenses prepare for action. Suppose a car ahead of you on the road suddenly veers out of control. This is an immediate stressful event. Your heart starts pounding faster, speeding the flow of blood to your extremities and providing muscles with the oxygen and fuel they need to take swift action, such as performing an emergency maneuver to avoid a collision. The body’s response during the alarm stage is called the fight-or-flight response because it is characterized by biological changes that prepare the body to deal with a threat by either fighting it off or fleeing from it.

The alarm stage is accompanied by strong physiological and psychological arousal. Our hearts pound, our breathing quickens, sweat pours down our foreheads, and we are flooded with strong emotions such as terror, fright, anxiety, rage, or anger.

Different stressful events may trigger the alarm stage of the GAS. The threat may be physical, as in an attack by an assailant, or psychological, as in an event that induces fear of failure (a professor handing out an examination, for example). In some people, the alarm is triggered whenever they meet a new person at a social gathering; they find themselves sweating heavily and feeling anxious, and they may become tongue-tied. In others, the body alarm system is activated whenever they visit the dentist. Whether the perceived threat is physical or psychological, the body's response is the same.

The alarm stage is like a “call to arms” that is prewired into the nervous system. This wiring is a legacy inherited from our earliest ancestors who faced many potential threats in their daily lives. A glimpse of a suspicious-looking object or a rustling sound in the bush might have cued them to the presence of a predator, triggering the fight-or-flight response, which helped prepare them to defend themselves against a threat. But the fight-or-flight response didn't last long. If they survived the immediate threat, their bodies returned to their normal state. If they failed, they simply perished.

Resistance Stage

Death may occur within the first few hours or days of exposure to a stressor that is so damaging (such as extreme cold) that its persistence is incompatible with life. But if survival is possible and the stressor continues, the body attempts to adapt to it as best it can. Selye called this part of the GAS the resistance stage (also called adaptation stage). During this stage, the body attempts to return to a normal biological state by restoring spent energy and repairing damage. Yet arousal remains high, though not as high as during the alarm reaction. This prolonged bodily arousal may be accompanied by such emotional reactions as anger, fatigue, and irritability.

Exhaustion Stage

If the stressor persists, the body may enter the final stage of the GAS—the exhaustion stage. Heart rate and respiration now decrease to conserve bodily resources. Yet with continued exposure to stress, the body's resources may become seriously depleted and the individual may develop what Selye called “diseases of adaptation”—stress-related disorders such as kidney disease, heart disease, allergic conditions, digestive disorders, and depression. Some people are hardier than others, but relentless, intense stress can eventually exhaust anyone. The figure on page 78 shows the changes that occur in the body's level of resistance across the three stages of the GAS.

A sensitive alarm system may have helped our ancient ancestors survive many of the physical threats they faced. Yet the alarm reaction was designed not to last very long. Our ancestors either escaped a predator or fought it off; within seconds, minutes perhaps, the threat was over and their bodies returned to their normal, pre-aroused state. The stresses of contemporary life are more persistent. Our ancestors didn't need to juggle school and jobs, fight daily traffic jams, or face the daily grind of working a double shift to make ends meet. The reality for many of us today is that the stressful demands of everyday life may repeatedly activate our alarm reaction day after day, year after year. Over time, persistent stress may tax our bodies' resources to the point where we become more susceptible to stress-related disorders.

Reading Assignment 2 (Acculturative Stress)

Reading Selection 3 (P. 83)

For immigrants, the demands of adjusting to a new culture can be a significant source of stress. Establishing a new life in one's adopted country can be a difficult adjustment, especially when there are differences in language and culture and few available jobs or training

opportunities. One significant source of stress is pressure to become acculturated—to adapt to the values, linguistic preferences, and customs of the host or dominant culture. How does acculturative stress, which results from this pressure, affect psychological health and adjustment?

What we've learned is that relationships between acculturation and psychological adjustment are complex (Escobar & Vega, 2000). Some researchers find that acculturated Hispanic Americans are more likely to develop psychological disorders than their less acculturated counterparts (Ortega et al., 2000). Others find that Mexican Americans born in the United States tend to show higher rates of psychological problems than recent immigrants from Mexico (Escobar, Hoyos Nervi, & Gara, 2000). But still other researchers link lower acculturation status among Hispanic Americans to higher risks of depression and anxiety (Neff & Hoppe, 1993; Salgado de Snyder, Cervantes, & Padilla, 1990; Zamanian et al., 1992).

In attempting to understand these mixed findings, we should note that the process of adjusting successfully to a new society depends on a number of factors. For example, stress associated with economic hardship is a major contributor to adjustment problems in immigrant groups, as it is for members of the host culture. And difficulties faced by poorly acculturated immigrants in gaining an economic foothold in the host country may lead to anxiety and depression. Not surprisingly, a study of immigrant Chinese children in the United States showed more adjustment problems among those living in more economically stressful situations (Short & Johnston, 1997). Yet acculturation can lead to an erosion of traditional family networks, which in turn may increase vulnerability to psychological disorders in the face of stress (Ortega et al., 2000).

All in all, factors such as economic opportunity, language proficiency, and connections to a social network of people whom one can identify with and draw support from may underlie the psychological adjustment of immigrant groups. Maintaining a sense of ethnic identity may also buffer the effects of stress (Ryder et al., 2000; Thompson et al., 2000). Studies of Asian Americans show that establishing contacts with the majority culture while maintaining one's ethnic identity generates less stress than withdrawal and separation (Huang, 1994). Withdrawal fails to prepare the individual to make the necessary adjustments to function effectively in a multicultural society. But we should not be surprised by evidence showing that Asian American adolescents with a stronger sense of ethnic identity tend to be better psychologically adjusted and to have higher self-esteem than their less affiliated counterparts (Phinney & Alipuria, 1990; Huang, 1994).

CHAPTER 3 : MANAGING A NEW WORLD

Reading Assignment 1 (Management Defined)

Reading Selection 1 (P. 102)

To begin with, we need to define management in order to highlight the importance, relevance, and necessity of studying it. Management is the process of working with and through others to achieve organizational objectives in a changing environment. Central to this process is the effective and efficient use of limited resources.

Five components of this definition require closer examination:

(1) working with and through others, (2) achieving organizational objectives, (3) balancing effectiveness and efficiency, (4) making the most of limited resources, and (5) coping with a changing environment.

Working with and Through Others

Management is, above all else, a social process. Many collective purposes bring individuals together—building cars, providing emergency health care, publishing books, and on

and on. But in all cases, managers are responsible for getting things done by working with and through others.

Aspiring managers who do not interact well with others hamper their careers. This was the conclusion two experts reached following interviews with 62 executives from the United States, the United Kingdom, Belgium, Spain, France, Germany, and Italy. Each of the executives was asked to describe two managers whose careers had been derailed. Derailed managers were those who had not lived up to their peers' and superiors' high expectations. The derailed managers reportedly had these shortcomings:

- ☒ Problems with interpersonal relationships.
- ☒ Failure to meet business objectives.
- ☒ Failure to build and lead a team.
- ☒ Inability to change and adapt during a transition.

Significantly, the first and third shortcomings involve failure to work effectively with and through others. The derailed managers experienced a number of interpersonal problems; among other things, they were perceived as manipulative, abusive, untrustworthy, demeaning, overly critical, not team players and poor communicators.

Even managers who make it all the way to the top often have interpersonal problems, according to management consultant Richard Hagberg. His study of 511 executive officers led to this conclusion about why managers often fail to inspire loyalty in employees:

Many are also hobbled by self-importance, which keeps them from hearing feedback about their own strengths and weaknesses. The head of one large company told me he and his wife recently were waiting in line to get his driver's license renewed. He was frustrated at how long it was taking and grumbled to his wife, "I have a lot to do. Don't they know who I am?" She replied, "Yeah, you're a plumber's son who got lucky." Her remark really got to him. It drove home how far he had gotten caught up in his sense of self-importance.

Achieving Organizational Objectives

An objective is a target to be strived for and, one hopes, attained. Like individuals, organizations are usually more successful when their activities are guided by challenging, yet achievable, objectives. For an individual, scheduling a course load becomes more systematic and efficient when a student sets an objective, such as graduating with a specific degree by a given date.

Although personal objectives are typically within the reach of individual effort, organizational objectives or goals always require collective action. A master of powerful organizational objectives is Carlos Ghosn, the Brazilian-born CEO of Nissan. When France's Renault bought a controlling interest in Nissan in 1999 and put Ghosn in charge, the Japanese automaker was a real money loser. Thanks to Ghosn's bold Nissan Revival Plan, based on lots of employee input, Nissan is turning a profit. Now comes the next step: Ghosn has laid out what he calls the "180 Plan" for Nissan. The "1" in the 180 Plan means Nissan intends to sell 1 million more vehicles a year worldwide than it does now. The "8"

refers to the target of 8% profit margin, roughly double what's typical. The "0" means the debt-burdened automaker wants no debt. The goals are to be accomplished before the end of 2005.

Thus, Ghosn's goal-oriented approach strives to inspire and energize Nissan's employees to achieve greater organizational success.

Balancing Effectiveness and Efficiency

Distinguishing between effectiveness and efficiency is much more than an exercise in semantics. The relationship between these two terms is important and it presents managers with a never-ending dilemma. Effectiveness entails promptly achieving a stated objective. Swinging a

sledgehammer against the wall, for example, would be an effective way to kill a bothersome fly. But given the reality of limited resources, effectiveness alone is not enough. Efficiency enters the picture when the resources required to achieve an objective are weighed against what was actually accomplished. Although a sledgehammer is an effective tool for killing flies, it is highly inefficient when the wasted effort and smashed walls are taken into consideration. A fly swatter is both an effective and an efficient tool for killing a single housefly.

Managers are responsible for balancing effectiveness and efficiency (see Figure 1.1). Too much emphasis in either direction leads to mismanagement. On the one hand, managers must be effective, although those who waste resources in the process flirt with bankruptcy.

On the other hand, managers need to be efficient by containing costs as much as possible and conserving limited resources. But managers who are too stingy with resources may not get the job done.

Making the Most of Limited Resources

We live in a world of scarcity. Those who are concerned with such matters worry not only about running out of nonrenewable energy and material resources but also about the lopsided use of those resources. The United States, for example, with about 5 percent of the world's population, currently uses about 25 percent of the world's annual oil production and creates 23 percent of the greenhouse gases linked to global warming.

Although experts and non-experts alike may argue over exactly how long it will take to use up our nonrenewable resources or come up with new technological alternatives, one bold fact remains. Our planet is becoming increasingly crowded.

Demographers who collect and study population statistics tell us the Earth's human population is growing by 8,741 people every hour (as the result of 15,020 births and 6,279 deaths.) The present world population of 6.1 billion people is projected to reach 9 billion within 70 years. Meanwhile, our planet's carrying capacity is open to speculation.

Approximately 83 percent of the world's population in the year 2020 will live in relatively poor and less-developed countries. Developed and industrialized nations, consequently, will experience increasing pressure to divide the limited resource pie more equitably.

"Because of their common focus on resources, economics and management are closely related. Economics is the study of how limited resources are distributed among alternative uses. In productive organizations, managers are the trustees of limited resources, and it is their job to see that the basic factors of production-land, labor, and capital-are used efficiently as well as effectively. Management could be called "applied economics."

Coping with a Changing Environment

Successful managers are the ones who anticipate and adjust to changing circumstances rather than being passively swept along or caught unprepared. Employers today are hiring managers who can take unfamiliar situations in stride. Successful managers doing business in the twenty-first century will need to be able to adjust to five overarching sources of change: globalization, the evolution of product quality, environmentalism, an ethical reawakening, and the Internet revolution.

Reading Assignment 3 (Diversity Boosts Allstate's Bottom Line)

Reading Selection 3 (P. 125)

A number of progressive companies that had a head start in elevating diversity to a strategic priority are starting to see the results, from better customer satisfaction to increased sales. Allstate Insurance Co. is one of those leaders (www.allstate.com). Since 1993, the Northbrook, Illinois, insurance company has been managing diversity as a central business issue closely

Prepared by KAUES (www.kaues.org)

connected to its overall corporate objectives. The focus is to drive greater levels of employee and customer satisfaction by taking an integrated approach to diversity in the workplace and the market.

Joan Crockett, Senior Vice-President for human resources at Allstate, stresses that the company's diversity initiative isn't a nice-to-do, social conscience program. "It's a compelling business strategy," she says.

An Integrated Approach

Diversity at Allstate is rooted in the company's culture, which has embodied inclusiveness and equal opportunity since the 1960s. But it wasn't until 1993 that it became a strategic initiative. Today, for Carlton Yearwood, Director of Diversity Management, the question thus becomes: "How do you take this workforce of differences and bring them together in a more powerful way so that it can impact business results?"

The answer was to incorporate differences into all business processes, such as decision-making and product innovation. Once Allstate began this process, it started to see an increase in its customer base and greater levels of customer satisfaction as well.

"Diversity has become an initiative that has clear business outcomes," Yearwood says. "If you start by having customers say they want to interact with knowledgeable workers who are like themselves, that gives the customers the absolute best services and products. Through the diversity initiative, we demonstrate our commitment to a diverse marketplace."

Just as a company would inject financial goals in daily operations, Allstate is resolved to penetrate its day-to-day functions with the concept of diversity. A number of processes have been established to bring the concept and strategy alive. These processes go beyond recruiting a diverse mix of employees to encompass a proactive retention strategy, ongoing training and education, a rigorous feedback mechanism, and community outreach.

Sensitivity to Customers

Allstate's leading position in market share among minorities reflects its commitment to local communities consisting of many ethnic backgrounds. The key to success is that local agents have learned over the years how to relate to the specific needs of their respective communities.

Allstate's director of relationship marketing, Andre Howell, says that learning from customers is the best way to develop products and services which serve their specific needs. "Education, education and education will be my primary lead," he says. "We need to be continuously in a learning mode from customers."

Howell works with a team of six to create a community outreach program whose ultimate aim is to capture a larger market share. These programs include financial and expert contributions to ethnic, local, and other organizations.

The company also works with community groups and homeowner associations to accelerate urban revitalization projects through its Neighborhood Partnership Program (NPP). By establishing a good relationship with residents of the communities, Allstate has been able to accelerate its customer acquisitions. In many cases, the company's businesses in inner cities that used to lose money are now profitable, says Ron McNeil, senior vice president for product operations.

"Our diverse workforce has allowed us to establish relationships in communities and allowed us to shorten the acquisitions curves for new customers," he says. The partnership program in Philadelphia, for example, boosted Allstate's market share in the city from 7.3 percent in 1993 to 33 percent in 1997.

CHAPTER 4 : GLOBAL OBESITY

Reading Assignment 1 (OBESITY AND BEING OVERWEIGHT)

Reading Selection 1 (P. 145)

FACTS:

- Globally, there are more than 1 billion overweight adults , at least 300 million of them obese.
- Obesity and being overweight pose a major risk for chronic diseases, including type 2 diabetes, cardiovascular disease, hypertension and stroke, and certain forms of cancer.
- The key causes are increased consumption of energy-dense foods high in saturated fats and sugars, and reduced physical activity.

Obesity has reached epidemic proportions globally, with more than one billion adults overweight—at least 300 million of them clinically obese—and is a major contributor to the global burden of chronic disease and disability. Often, coexisting in developing countries with under-nutrition, obesity is a complex condition, with serious social and psychological dimensions, affecting virtually all ages and socioeconomic groups.

Increased consumption of more energy-dense, nutrient-poor foods with high levels of sugar and saturated fats, combined with reduced physical activity, have led to obesity rates that have risen three-fold or more since 1980 in some areas of North America, the United Kingdom, Eastern Europe, the Middle East, the Pacific Islands, Australasia and China. The obesity epidemic is not restricted to industrialized societies; this increase is often faster in developing countries than in the developed world.

Obesity and being overweight pose a major risk for serious diet-related chronic diseases, including type 2 diabetes, cardiovascular disease, hypertension and stroke, and certain forms of cancer. The health consequences range from increased risk of premature death, to serious chronic conditions that reduce the overall quality of life. Of especial concern is the increasing incidence of child obesity.

Why Is This Happening?

The rising epidemic reflects the profound changes in society and in behavioral patterns of communities over recent decades. While genes are important in determining a person's susceptibility to weight gain, energy balance is determined by calorie intake and physical activity. Thus societal changes and worldwide nutrition transition are driving the obesity epidemic. Economic growth, modernization, urbanization and globalization of food markets are just some of the forces thought to underlie the epidemic.

As incomes rise and populations become more urban, diets high in complex carbohydrates give way to more varied diets with a higher proportion of fats, saturated fats and sugars. At the same time, large shifts towards less physically demanding work have been observed worldwide. Moves toward less physical activity are also found in the increasing use of automated transport, technology in the home, and more passive leisure pursuits.

How Do We Define Obesity and Being Overweight?

The prevalence of being overweight and obesity is commonly assessed by using body mass index (BMI), defined as the weight in kilograms divided by the square of the height in meters (kg/m^2). A BMI over $25 \text{ kg}/\text{m}^2$ is defined as overweight, and a BMI of over $30 \text{ kg}/\text{m}^2$ as obese. These markers provide common benchmarks for assessment, but the risks of disease in all populations can increase progressively from lower BMI levels.

Adult mean BMI levels of $22\text{--}23 \text{ kg}/\text{m}^2$ are found in Africa and Asia, while levels of $25\text{--}27 \text{ kg}/\text{m}^2$ are prevalent across North America, Europe, and in some Latin American, North

African and Pacific Island countries. BMI increases amongst middle-aged elderly people, who are at the greatest risk of health complications. In countries undergoing nutrition transition, overnutrition often co-exists with undernutrition. People with a BMI below 18.5 kg/m² tend to be underweight.

The distribution of BMI is shifting upwards in many populations. And recent studies have shown the people who were undernourished in early life and then become obese in adulthood, tend to develop conditions such as high blood pressure, heart disease and diabetes at an earlier age and in more severe form than those who were never undernourished.

The Extent of the Problem

Currently more than 1 billion adults are overweight—and at least 300 million of them are clinically obese. Current obesity levels range from below 5% in China, Japan and certain African nations, to over 75% in urban Samoa. But even in relatively low prevalence countries like China, rates are almost 20% in some cities.

Childhood obesity is already epidemic in some areas and on the rise in others. An estimated 17.6 million children under five are estimated to be overweight worldwide. According to the U.S. Surgeon General, in the USA the number of overweight children has doubled and the number of overweight adolescents has trebled since 1980. The prevalence of obese children aged 6—11 years has more than doubled since the 1960s. Obesity prevalence in youths aged 12—17 has increased dramatically from 5% to 13% in boys and from 5% to 9% in girls between 1966—70 and 1988—91 in the USA. The problem is global and increasingly extends into the developing world; for example, in Thailand the prevalence of obesity in 5-to-12-year-old children rose from 12.2% to 15.6% in just two years.

Obesity accounts for 2—6% of total health care costs in several developed countries; some estimates put the figure as high as 7%. The true costs are undoubtedly much greater as not all obesity-related conditions are included in the calculations.

How Does Excess Body Fat Impact Health?

Being overweight and obesity lead to adverse metabolic effects on blood pressure, cholesterol, triglycerides and insulin resistance. Some confusion of the consequences of obesity arise because researchers have used different BMI cut-offs, and because the presence of many medical conditions involved in the development of obesity may confuse the effects of obesity itself.

The non-fatal, but debilitating health problems associated with obesity include respiratory difficulties, chronic musculoskeletal problems, skin problems and infertility. The more life-threatening problems fall into four main areas: cardiovascular disease problems; conditions associated with insulin resistance such as type 2 diabetes; certain types of cancers, especially the hormonally related and large-bowel cancers; and gallbladder disease.

The likelihood of developing type 2 diabetes and hypertension rises steeply with increasing body fatness. Confined to older adults for most of the 20th century, this disease now affects obese children even before puberty. Approximately 80% of people with diabetes are type 2, and of these, 90% are obese or overweight. And this is increasingly a developing world problem. In 1995, the Emerging Market Economics had the highest number of diabetics. If current trends continue, India and the Middle Eastern crescent will have taken over by 2025. Large increases would also be observed in China, Latin America and the Caribbean, and the rest of Asia.

Raised BMI also increases the risks of cancer of the breast, colon, prostate, endometrium, kidney and gallbladder. Chronic over-weight and obesity contribute significantly to osteoarthritis, a major cause of disability in adults. Although obesity should be considered a disease in its own right, it is also one of the key risk factors for other chronic diseases together with smoking, high

blood pressure and high blood cholesterol. In the analyses carried out for *World Health Report 2002*, approximately 58% of diabetes and 21% of ischaemic heart disease and 8—42% of certain cancers globally were attributable to a BMI above 21 kg/m².

What Can We Do about It?

Effective weight management for individuals and groups at risk of developing obesity involves a range of long-term strategies. These include prevention, weight maintenance, management of co-morbidities and weight loss. They should be part of an integrated, multi-sectoral, population-based approach, which includes environmental support for healthy diets and regular physical activity. Key elements include:

- Creating supportive population-based environments through public policies that promote the availability and accessibility of a variety of low-fat, high-fiber foods, and that provide opportunities for physical activity.
- Promoting healthy behaviors to encourage, motivate and enable individuals to lose weight by:
eating more fruit and vegetables, as well as nuts and whole grains;
engaging in daily moderate physical activity for at least 30 minutes;
cutting the amount of fatty, sugary foods in the diet;
moving from saturated animal-based fats to unsaturated vegetable-oil based fats.
- Mounting a clinical response to the existing burden of obesity and associated conditions through clinical programs and staff training to ensure effective support for those affected to lose weight or avoid further weight gain.

Reading Assignment 2 (News Reports from Two Countries)

Reading Selection 2 (P. 159)

NEWS REPORT 1: MORE MONEY, MORE OBESITY IN CHILDREN

[SUNDAY, MAY 26, 2002] NEW DELHI: Affluence is now taking its toll on children's health, with a new study in Delhi indicating that every 15th school-going child in the high- or high-middle income group is obese.

The study conducted in a public school cautions that all these children are prone to hypertension, diabetes, coronary artery disease and overall morbidity and mortality during adult life.

"There is increasing evidence that children and adolescents of affluent families are overweight. It is possibly because of decreased physical activity, sedentary lifestyle, altered eating patterns with more fat content in the diet," Dr. Umesh Kapil, adjunct professor from the Department of Human Nutrition and Bio statistics at AIIMS, who along with his team conducted the study, said.

"Only 19 percent of the school children were found to be engaged in outdoor activities in our study, while 90 percent of the obese children did not engage in any outdoor activity at all," Kapil said.

The research, involving 870 children, was carried out in a public school of Delhi catering to the affluent segment of the population. It reported an overall prevalence of obesity as 7.4 percent. An earlier study in 1990 had reported an almost similar prevalence of obesity, according to the paper published in the science journal *Indian Pediatrics*.

Kapil said prevalence of a disorder above five percent was a public health problem. These children would grow into adults and were likely to contribute the ever increasing burden of non-communicable diseases, he said.

“Once obese, a child remains so in adulthood and even old age. Obesity also leads to hypertension, cardiovascular diseases, gall stones, osteoarthritis and diabetes,” he said. Kapil said children from affluent sections were frequenting fast-food joints more often, were engaged in indoor activities like watching television and computer games and doing less physical activity. With affluence, there is a tendency to enhance consumption of costly fatty items and oil.

This led to a positive calorific balance with children eating more calories than they are expending. “Forty to fifty years back, children used to engage in more outdoor activities,” he said.

A large number of children in the study had a high calorific intake and visited fast-food joints. Besides, most of the children had to skip their morning breakfast as they had to leave for schools early. In the school, they would consume oily cafeteria stuff. He said 28 percent of the children visited fast-food joints once a week and 18 percent visited twice a week.

Only 19 percent of all of the children were engaged in outdoor activities—38 percent were entertained through TV, 21 percent through computers, 10 percent by music, and eight percent were engaged in reading.

The study also related obesity with nuclear families stating that 65 percent of the children in the study were from nuclear families. Kapil said in nuclear families there is no dearth of funds which might lead to children spending money on fatty food.

The phenomenon is prevalent in other parts of the world as well. During the past 20 years, the prevalence of obesity among children and adolescents has doubled in the U.S., the study said.

According to the statistics available with the U.S. National Center for Health, nearly 15 percent of adolescents are overweight (when ratio of weight and height is between 25 and 30) or obese (when this ratio is more than 30), it said.

The paper said the maximum prevalence of obesity was found during the pubertal period, between 10 and 12 years. This may be associated with the increase in fat tissues and overall weight gain during the pubertal growth spurt.

Kapil explained that one factor for this may be that children at this age start getting independent pocket money, which they might be spending on fatty eatables in school canteens.

He said the problem was that children were unaware of their nutritional needs, adding that adolescent education programs should be introduced in schools.

Reading Selection 2 (P. 161)

NEWS REPORT 2: TACKLING ASIA'S GROWING WAISTLINE

Sunday, November 2, 2003 TIANJIN, China (CNN) — Acupuncture needles get planted on the flabby frame of Cheng Jian, a 20-year-old student undergoing treatment to cure obesity.

“The discomfort,” he says, “is nothing compared to the pain of being extremely obese.”

“People talked behind my back because they hadn’t seen a person as fat as I was,” he tells CNN.

Cheng is one of the many Chinese and foreign patients who have checked into the Aimin Obesity Reduction Hospital to lose weight and gain self-esteem.

Twenty-five years of China’s economic boom have brought the good life, sedentary lifestyles and fat-laden food—swelling people’s waistlines.

“The number of obese youths grows 10 percent every year,” says Aimin hospital director Shi Lidong. “It’s partly because they are spoiled by doting parents and grandparents.”

Aimin's doctors offer unconventional treatment. "Acupuncture mainly helps reduce appetite and improve metabolism. But our treatment is holistic."

In the virtual fat farm, patients are given meals with carefully counted calories. They are also counseled on how to change eating habits.

In between meals, they do physical exercises, like running and dance aerobics.

The fat farm's solution is basic: eat less, and exercise more. Here, the chubby generation learns how to burn calories and melt the fat away.

But some weight-watchers still get nightmares while trying to curb their cravings.

"A fellow patient dreamt of eating out with her parents, but they refused to give her food," says a camper, Wang Ping.

"She shouted in her dream, 'why not let me eat!' We were all awakened by her screams."

Fat-farmers get emotional support and inspiration from graduates like Meng Qinggang, Aimin's most celebrated success story.

Meng weighed 215 kilograms (473 pounds) when he sought Aimin's help three years ago.

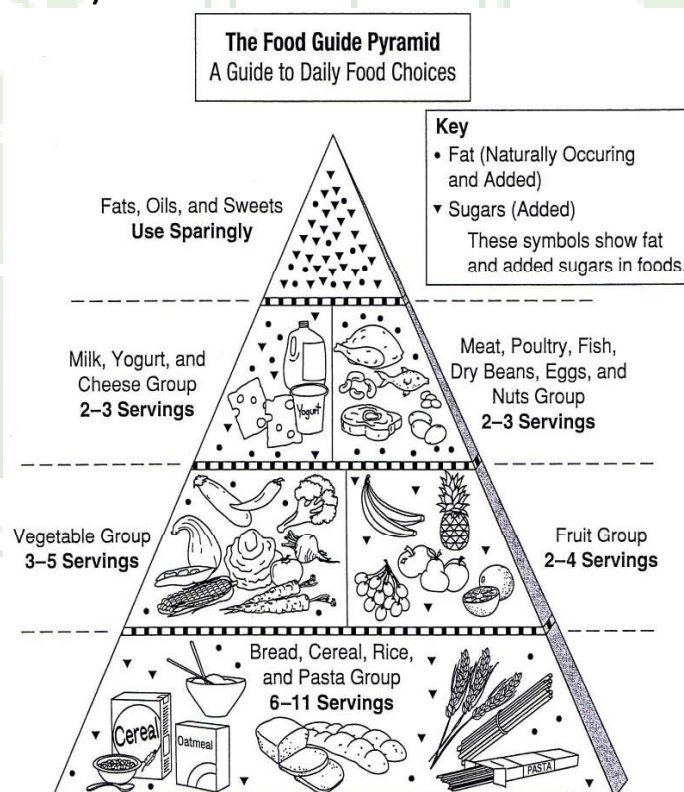
"I used to eat five meals a day. I needed help to put on clothes or walk. I was close to dying," Meng tells CNN.

Meng then lost 80 kilos (176 pounds) in 100 days, and slimmed down even more. He now weighs 89 kilos (196 pounds).

"I can now drink beer and even eat fried, high-calorie food. It's okay as long as the amount is right," he says. "And I run regularly."

Reading Assignment 3 (Picture This! Communicating Nutrition around the World)

Reading Selection 3 (P. 169)



What picture comes to mind when you think of a healthful diet? The U.S. Departments of Agriculture (USDA) and Health and Human Services hope you think of their Food Guide Pyramid. Since 1992, the Pyramid has served as a visual adaptation of the U.S. Dietary Guidelines for Americans, the seven basic dietary recommendations to promote wellness and prevent chronic

disease. Today, the Pyramid can be seen not only in nutrition education materials for children and adults, but also on grocery bags, food packages and in the media.

Food guides, such as the USDA's Food Guide Pyramid, are tools used to communicate complex scientific information in a consumer- friendly way. For the most part, government agencies use graphic depictions to communicate dietary guidance messages that provide population-wide recommendations for eating to promote health.

A Photographic History

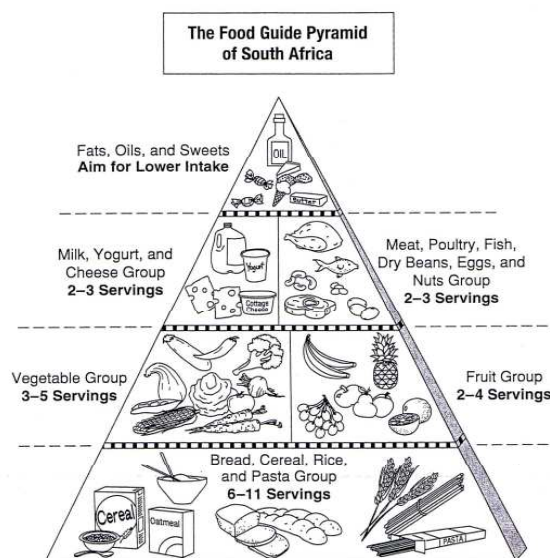
Food guides are not new educational tools. The first United States food guide was developed in 1916 by the USDA and consisted of five food groups—milk and meat; cereals; vegetables and fruits; fats and fat foods; and sugars and sugar foods. By the 1940s, the food guide listed ten food groups, including water and eggs. Vegetables and fruits were split into three individual groups— leafy green and yellow vegetables; citrus, tomato and cabbage; and other vegetables and fruits. Ten food groups were difficult for consumers to remember, so these groups were trimmed to four food groups by the late 1950s.

Previous versions of the United States food guide were tools used to promote a diet containing essential vitamins and minerals. School children were often the educational target for the simple illustrations used to depict the optimal diet. One of the most familiar food guides of the past is the “Basic Four,” containing four food groups—milk, fruit and vegetable, bread and cereal, and meat groups—which was used for nearly 25 years. The emphasis of the “Basic Four” food guide was to help Americans get a foundation diet, meaning, it was intended to meet only a portion of caloric and nutrient needs.

After the publication of the first Dietary Guidelines for Americans in 1980, work began on a new food guide graphic to reflect the latest science on diet and health. In addition to a review of existing research, government agencies conducted extensive quantitative and qualitative research with American consumers to ensure the resulting graphic communicated key dietary guideline concepts. The pyramid design proved most useful in graphically communicating the intended messages across various socioeconomic groups.

No single adaptation of the pyramid graphic can depict all of the eating practices of the diverse American populace. However, because of the simplicity and understandability of the pyramid shape, the U.S. Food Guide Pyramid can be translated to reflect the customs of numerous ethnic and cultural groups within the United States. The pyramid concept has been adapted to Asian, Mexican, vegetarian and Mediterranean diets by various organizations. For instance, to better serve their state population, the Washington State Department of Health created materials using the pyramid shape to depict diets for Russians, Southeast Asians and Native Americans.

The pyramid concept has also been adapted to communicate other health-promoting activities. For example, a physical activity pyramid, developed by a private organization, promotes ways to stay active in everyday life, and a “life balance” pyramid by the same group offers ideas to build and maintain emotional well-being.



Source: <http://www.time-to-run.com/nutrition/pyramid.htm>.

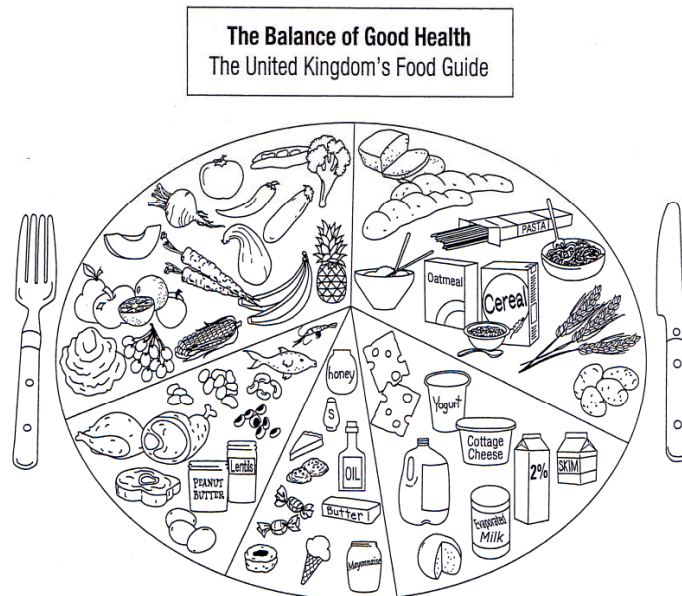
Pictures From Around the World

The use of the pyramid has been very successful in the United States. The pyramid shape appears to easily convey the concept of variety and the relative amounts to eat of the various food groups.

However, because of cultural differences in communicating symbolism and other cultural norms, the pyramid is not necessarily the graphic of choice for food guides worldwide. No single graphic can portray the dietary guidelines of various countries around the world. Rainbows, circles, pyramids, and even a chalice are used to represent the “optimal” diet. The different graphics used reflect cultural norms and symbols as well as the emphasis of the dietary guidelines of each country. In developed countries, food guides tend to promote a diet that prevents chronic disease. In developing countries, however, the goal of the food guide is to promote a diet that provides nutrients to safeguard against malnutrition.

Yet, despite the different pictorial representations, different countries communicate similar themes. Food guide graphics from countries as diverse as Italy and South Africa convey a common message—balance, variety and moderation in food choices. While the number of food groups displayed in the graphics varies from country to country, most guides attempt to illustrate the food groups’ optimal proportion of the total diet, as does the U.S. Food Guide Pyramid. For instance, based on the Dietary Guidelines for Americans, grains should comprise the largest proportion of the diet.

Therefore, grains are depicted at the base of the Pyramid—the largest part of the pyramid shape. Breads and grains, fruits, vegetables, dairy foods and meats are included in all the various guides.



The wheel or dinner plate design is a popular graphic that represents the total diet, with each section depicting a food group and its relative proportion to the total diet. This design is used in the United Kingdom, Germany and Norway, among other countries. Many of the food guide graphics used are unique to their respective countries. Japan depicts its “optimal” diet through the use of the numeral six as the basis of its food guide to remind consumers of the six food categories. The Japanese government has since developed new dietary guidelines. However, the same food guide is still used by many as a reference since a new food guide has not been developed.



Canada's Food Guide to Healthy Eating is a four-banded rainbow, with each color representing one of its four food groups. The rainbow shows that all food groups are important but different amounts are needed from each group. The larger outer arcs of the rainbow are the grain products and fruits and vegetables. According to Canada's dietary guidelines, these foods should make up a larger part of a healthy eating plan. Similarly, the smaller inner arcs make up the milk products and meat and meat alternatives that should make up a smaller amount of a healthy eating plan.

Many of the food guides around the world emphasize the bread, cereals and grain foods as the largest part of the diet. Israel's chalice graphic illustrates the importance of water for overall health by placing "water" at the top and largest section of the chalice. Israel has one of few food guides that characterize water as a principal part of the diet.

South Africa's food guide graphic contains the least number of food groups and organizes foods in a unique way—according to the foods' "function" in the body. Group 1 contains "Energy Food," and includes margarine, grains, porridge and maize. The second group is entitled "Body Building Food" and includes chicken, beans, milk and eggs. The third group is "Protective Food," to protect your body from illness and includes cabbage, carrots, pineapples and spinach.

A Picture Paints a Thousand Words

You've undoubtedly heard the phrase "a picture paints a thousand words" numerous times. Nutrition education has long proven this idiom to ring true through the use of food models and pictures to depict such things as portion sizes. Likewise, symbols such as a heart, checkmark or apple are often used on restaurant menus to denote choices that meet specific nutrition or health guidelines.

The primary role of food guides, whether in the United States or around the world, is to communicate an optimal diet for overall health of the population. Whether a star, a chalice, a square or a pyramid graphic is used, all are meant to improve quality of life and nutritional well-being in a simplified and understandable way.

Key Concepts for Dietary Patterns:

- Total diet, rather than nutrients or individual foods should be addressed.
- Dietary guidelines need to reflect food patterns rather than numeric nutrient goals.
- Various dietary patterns can be consistent with good health.

CHAPTER 5 : THE THREAD OF LIFE

Reading Assignment 1 (GENETICS AND HEREDITY)

Reading Selection 1 (P. 198)

Make a wish before you blow out the candles!" But before Sheila could finish speaking, all twelve candles had been extinguished. It had been a great birthday party for the two five-year-olds and their guests. Fortunately, enough candles had been found to signal each year of growth and to continue the custom of adding "one to grow on."

When Sheila first learned that she would become a mother, she had not realized just how much work it would be to rear a child, even though her husband had been an enormous help. Then again, she had not planned on having identical twins! Thus, for this party (as for just about everything else) there were two cakes to be decorated, two presents to be wrapped, two sets of friends to invite to the festivities. Jasmine and Alyssa seemed to bask in the attention they were receiving on their special day. Their excited voices sounded so much alike, indistinguishable by others, including their parents, unless the listener could see which of the twins was speaking (and could remember what each was wearing for the day). The twins enjoyed many of the same games and activities; they displayed the same impatience when others couldn't tell whether they were speaking with Jasmine or Alyssa. But there were differences, too. Jasmine was more impulsive, willing to try new things, likely to jump into the fray of things without a second thought, and less sensitive to the concerns of others. Alyssa was more cautious and careful and seemed to become upset easily, but she was also more willing to help her friends. And although they shared many

friends, each twin had preferences for certain playmates. For their mother, it was a puzzle: Why were they similar in so many ways but at the same time clearly different?

Principles of Hereditary Transmission

Whether we have freckles, blonde hair, or a certain type of personality can be influenced by genetic factors, but none of these characteristics is bestowed' on us at conception any more directly than our ultimate height is. We must make a distinction, then, between what is supplied as our genetic makeup and the kinds of individuals we eventually become. That difference serves as the basis for distinguishing between **genotype**, a person's constant, inherited genetic endowment, and **phenotype**, an individual's observable, measurable features, characteristics, and behaviors.

A given phenotype is the product of complex interactions involving the genotype and the many events that comprise an individual's experience.

Modern theories of the genotype can be traced to a series of experiments reported in 1866 by Gregor Mendel, an Austrian monk.

From his observations of the characteristics of successive generations of peas, Mendel theorized that hereditary characteristics are determined by pairs of particles called factors (later termed genes, the specialized sequences of molecules that form the genotype). He also proposed that the information provided by the two members of a pair of genes is not always identical. These different forms of a gene are today known as **alleles**. The terms *gene* and *allele* are often used interchangeably, but an allele refers to the specific variation (and sometimes many possible variations exist) found in a particular gene.

Mendel also outlined the basic principle by which genes are transferred from one generation to another. He concluded that offspring randomly receive one member of every pair of genes from the mother and one from the father. This is possible because the parents' **gametes**, or sex cells (egg and sperm), carry only one member of each pair of genes. Thus, when egg and sperm combined during fertilization, a new pair of genes, one member of the pair inherited from each parent, is reestablished in the offspring. That individual, in turn, may transmit either member of this new pair to subsequent children. In this way, a given genotype can be passed on from one generation to the next.

At about the same time Mendel's research was published, biologists discovered **chromosomes**, long, threadlike structures in the nucleus of nearly every cell in the body. In the early 1900s, several researchers independently hypothesized that genes are located on chromosomes. Yet another major breakthrough occurred in 1953 when James Watson and Frances Crick deciphered the structure of chromosomes and, in so doing, proposed a powerfully elegant way by which genes are duplicated during cell division. By 1956, researchers had documented the existence of forty-six chromosomes in normal human body cells. [Researchers have completed a map of] the entire **human genome**, the set of genes and sequencing of complex molecules that make up the genetic information contained in all forty-six chromosomes (Collins et al., 1998 Guyer & Collins, 1993).

The Building Blocks of Heredity

How could hereditary factors play a part in the similarities displayed by Jasmine and Alyssa, or in a child's remarkable mathematical ability or yet another's mental retardation? To understand the genotype and its effects on appearance, behavior, personality, or intellectual ability, we must consider genetic mechanisms at many different levels.

To begin with, every living organism is composed of cells—in the case of mature humans, trillions of cells. As Figure 3.1 indicates on page 202, within the nucleus of nearly all cells are the chromosomes that carry genetic information critical to their functioning. Genes, regions within

the strands of chromosomes, determine the production of enzymes and specific proteins in the cell. The genes, in turn, are made up of various arrangements of four different chemical building blocks called nucleotides that contain one of four nitrogen-based molecules (*adenine, thymine, cytosine, or guanine*). The nucleotides link together in one of only two kinds of pairings to form the rungs of a remarkably long, spiral, ladder like structure called DNA or deoxyribonucleic acid (see Figure 3.1). An average of about a thousand nucleotide pairs make up each gene, although some genes have substantially more pairings (National Research Council, 1998). Specific genes differ from one another in number and sequence of nucleotide pairings and in their location on the chemical spiral staircases, or chains of DNA that we call the chromosomes.

Just as Mendel had theorized, hereditary attributes are, in most cases, influenced by pairs of genes or, more specifically, the two allelic forms of the pair. One member of the pair is located on a chromosome inherited from the mother, the other on a chromosome inherited from the father. These two chromosomes are called *homologous* (similar). Human beings have twenty-three pairs, or a total of forty-six chromosomes.

Hereditary contributions to development can be observed at many levels. Figure 3.1 depicts five major levels. Nearly every cell in the human body carries the genetic blueprint for development in the chromosomes. Specific regions on each chromosome, the genes, regulate protein and enzyme production and can be further examined in terms of the nucleotides, chemical molecules that are the building blocks for the genes. Each of these different levels of the individual's biological makeup can offer insights into the mechanisms by which the genotype affects the phenotype, the observable expression of traits and behaviors.

Reading Assignment 2 (The Real Eve)

Reading Selection 2 (P. 219)

The greatest journey ever undertaken left behind a trail of unanswered questions: How did our species arise and spread around the globe to become the most dominant creature on the planet? Part of the answer came two decades ago, when scientists stunned the world with the finding, based on genetic research, that all humans alive today can claim as a common ancestor a woman who lived in Africa some 150,000 years ago—dubbed, inevitably, “Eve.” But while the notion of an African origin of the human family has grown to be accepted by most scientists, the details of how Eve’s ancestors swept out of Africa to populate the rest of the world have remained murky.

Now a team of scientists claim that, based on research on the ancient climate, findings in archaeology and a new, clearer genetic picture of how the human family tree has branched over the eons, the ancient itinerary of the human Diaspora can finally be pieced together. It is an epic story of escape from starvation, glaciers and volcanoes, and braving shark-infested waters in flimsy rafts. And like any good tale, it has a surprise ending: Contrary to established thinking, it appears that our human ancestors took a more southerly route out of Africa, traveling east across the Red Sea into what is now Yemen, and then through India and all the way to the far reaches of Australia, before they swung up into Europe. “There was only one migration out of Africa,” says Stephen Oppenheimer of Oxford University, who is a leading proponent of this new synthesis of our species’ incredible journey. “They couldn’t go north—that was blocked by a desert—so they had to go south.”

A crucial cornerstone of Oppenheimer's piecing together of the human itinerary is the recent finding by Huddersfield University geneticist Martin Richards and his colleagues that the world's entire population can be traced back to a family tree that has its roots in Africa and a single branch leading out of the continent and into the rest of the world. Based on analysis of thousands of DNA samples from people worldwide, Richards' research reveals a detailed map of the human family tree and its various branches.

Digging Through Genes

Richards' research extended the work of scientists over the past two decades who have been reconstructing human origins by studying snippets of DNA from tiny cellular structures called mitochondria. Part of every cell in the human body, mitochondria produce the energy needed by all living creatures and, remarkably, possess their own DNA that is completely independent of the principal cellular DNA residing in the nucleus. Known as mitochondrial DNA—or mtDNA—this genetic material has a property that makes it a unique tool for studying human origins:

During conception, half the mother's DNA and half the father's DNA merge to create a unique suite of genes that goes into creating a human being. But mtDNA does not undergo this genetic reshuffling;

rather, the mitochondria—along with their mtDNA—in a sperm cell wither and die, while the mitochondria present in the egg cell live on intact from generation to generation. Thus everyone carries with them a more-or-less exact copy of the mtDNA from their mother, and their mother's mother, and her mother, and her mother, and so on back through countless generations.

The term "more or less exact" is the key to scientists solving the mystery of human origins. That's because like all DNA, mtDNA is subject to random mutations over the eons. And because these mutations are passed intact to the next generations, they in effect become "tracers" of family branches. If two strands of mtDNA from two different people reveal the same mutation, these people must share the same ancient great-great-great-grandmother from whence this mutation arose. Working from the assumption that genetic mutations occur more or less regularly over time, scientists can compare two samples of mtDNA, noting where they have shared mutations and where they do not share mutations, and resolve the time in prehistory when the peoples' ancestral populations diverged. Using this technique, researcher Rebecca Cann and her colleagues showed that all humans can be traced back to an ancient mitochondrial "Eve" who lived in Africa perhaps 150,000 years ago.

This "Eve" was by no means the source of all the genes in the world's living population. After all, each person is a reshuffled combination of 30,000 genes from many different ancestors stretching back generations. But each person's mtDNA is a copy from only one direct line of ancestors: their mother's mother's mother's mother, etc. In the same way, the mtDNA from Eve merely acts as a tracer that links all present-day humans to a single population of ancient humans, estimated at 10,000 people or so, who lived in Africa several hundred thousand years ago.

The Climate Connection

While Richards' genetic research suggests that only one branch of ancient humans migrated out of Africa to give rise to modern populations, research on ancient climate changes helps pinpoint the time when this migration must have occurred, argues Oppenheimer. Some 80,000 years ago, the world's climate began to cool into a period of glaciation. The polar ice caps reached far down into Europe, lowering sea levels and turning much of Africa into arid desert. This climatic shift occurred roughly at the time when the genetic evidence suggests that the tree of human life sprouted a branch that crossed onto the Arabian Peninsula toward India and Southeast Asia. Indeed, notes Oppenheimer, human-made tools dating back nearly 75,000 years

have been found as far east as Malaysia. From there, our human ancestors pushed across shark-infested waters to Australia, where they left behind stone artifacts dating back 60,000 years. There were no doubt other human migrations out of Africa before this time. For example, ancient human remains dating from 100,000 to 120,000 years ago have been unearthed in what is now Israel. However, these populations, like others, perished without leaving their genetic imprint on present-day humans. By the time the climatic changes gave rise to the exodus some 80,000 years ago, the migration pathway out of Africa through the Near East was blocked by the Sahara desert, says Oppenheimer, and so the only way out was southward.

It was only after the climate shifted again some 50,000 years ago, creating strong monsoons that turned what was once desert into the lush growth of the so-called “Fertile Crescent” stretching from the Arabian Gulf to Turkey, that humans had the pathway to begin the push into what is now modern-day Europe. The land at that time was populated by another kind of human—Neanderthals—who had reached there hundreds of thousands of years before.

While the two species of humans shared the continent for more than 10,000 years, recent studies of DNA drawn from Neanderthal fossils reveal that there was no interbreeding between the two populations that left a trace in the modern world. Indeed, nearly all Europeans—and by extension, many Americans—can trace their ancestors to only four mtDNA lines, which appeared between 10,000 and 50,000 years ago and originated from South Asia.

The Incredible Journey

The final stage in the human odyssey was again triggered by climate change: The genetic evidence suggests that as the seas retreated during the buildup of the polar ice caps 20,000 to 25,000 years ago, humans crossed over the bridge of land—now underwater—that connects what is now Siberia and Alaska, says Cambridge University’s Peter Forster. The distinctive markers in the strands of mtDNA they brought with them are still found in Siberia and Asia today. These ancient humans spread throughout all of the Americas, surviving the intense glaciation that followed, and leaving stone tools dating back 16,000 years at a site in present-day Pennsylvania. The peopling of the planet was complete.

Despite the sweeping saga of migration and branching of the human family tree over the past 7,000 generations since “Eve,” perhaps the most startling result of the new picture of human evolution is how very closely related are all humans. In fact, the research reveals that there is less genetic variation among Earth’s entire population of humans than there is in a typical troop of our closest relative, the chimpanzee. In the quest to find ancient family ties, one need look only to one’s neighbor—or to the far end of the globe. “We are all born with an extraordinary interest in where we came from, and who our relatives are,” says Oppenheimer. “This really brings home that we are just one big, very close family.”

Reading Assignment 3 (The Great Family)

Reading Selection 3 (P. 235)

I don’t know when I first became aware of science’s efforts to weave all the world’s organisms into a great family tree, systematically relating one thing to another by way of likeness. I do remember learning from my older sister the neat trick of spotting families of flowers through common characteristics. The crucifers—cabbage, turnip, radish—have a slender seedpod and four petals that form a cross. A violet you can tell by its five petals and by its pistil, shaped like a short beak. Through the mint family, Labiatae, run two flaring lips, square stems, and a distinctive aroma.

When I was twelve or thirteen, my father taught me the Latin binomials for common species of birds: *Dendroica pinus*, *Dendroica discolor*, *Sitta carolinensis*, *Sitta pusilla*. We rose early in the morning to watch birds together, moving quietly in late starlight.

Small sounds would hatch from the foliage, not just the normal morning short calls, the hoots, squawks, jargles, whistles, and rasps, but clear strands of real music that seemed to be sung for joy. If luck was with us, we would be jogged awake by the thin fluting notes of a goldfinch or the chromatic cry of a whitethroat. (Later I would learn the surprising fact that stripe-backed wrens so systematically pass their vocalization down from father to son and from mother to daughter, like a beloved heirloom, that their songs are a highly reliable way of determining family ties.)

Most bird families were a joy to learn: the three little titmice, Paridae; three nuthatches, Sittidae; six swallows, Hirundinidae; seven woodpeckers, Picidae. I loved finding that I could join two birds and see in them one nature; then three birds; then twelve, the faint tracings of individual species converging into major family paths. I remember how the discovery that the natural world had been classified and given two-part scientific names—names that were, in fact, a way of weaving creatures together by natural principles of likeness—shot through me like a bolt of happiness.

In the eighteenth century Linnaeus arranged living things in a pattern based on these principles (and freely admitted to being the one chosen to do so, the one whom “God has suffered. . . to peep into his secret cabinet”). I grew to love the Linnaean system, the great animal and botanical divisions, the tidy nests within nests, all the shreds of creation revealed and broken down into pieces, then stitched back together in a great familial tree.

Charles Darwin gave ground for the view that the likenesses Linnaeus observed were quite literally *family* likenesses, that individual species were netted together by threads of ancestry. As he wrote in *Origin of Species*: “All living things have much in common, in their chemical composition, their germinal vesicles, their cellular structure, and their laws of growth and reproduction.” In the book’s only illustration, Darwin showed variants within a species as branches of a tree. He later explained that the “limbs divided into great branches . . . were themselves once, when the tree was small, budding twigs.” All modern species diverged from a set of ancestors, which themselves had evolved from still fewer ancestors, going back to the beginning of life. The relations among all could be represented as a single great dendritic tree.

Darwin himself was heir to assorted intuitions on the kinship of living things. In 1793 William Blake wrote:

Am not I
A fly like thee?
Or art not thou
A man like me?

A drawing made by Blake the same year shows a caterpillar on a leaf arched over a lower leaf, on which reclines a second simple, cocoonlike form, this one with the face of a baby. The drawing is titled *What Is Man?*

John Clare called flies “the small or dwarfish portion of our own family.” That was in 1837, just before the English nature poet was declared insane and committed to an asylum.

“It seems that Nature has taken pleasure in varying the same mechanism in an infinity of different ways,” wrote the eighteenth-century French philosopher Denis Diderot. “She abandons one type of product only after having multiplied individuals in all possible modes.”

Diderot’s contemporary, the naturalist Georges Louis Leclerc, Comte de Buffon, came close to anticipating Darwin. He wrote, “It may be assumed that all animals arise from a single

form of life which in the course of time produced the rest by process of perfection and degeneration.” A single plan of organization could be traced back from man through fish, said Buffon in his encyclopedic *Histoire naturelle*.

Richard Owen, a quick-witted and prescient British anatomist, made detailed observations of the unities underlying life’s wild range of differences. The wing of the bird, fin of the fish, hand of man, he wrote in 1848, were all built according to a single design. These “homologies” were of far greater importance in the scheme of God’s grand plan than the minor adaptations that distinguished the organ of one creature from that of the next.

The mind must embrace the whole and deduce a general type from it, wrote Goethe. The German polymath, whose interest in unity grew out of the terrible divisions of his age, possessed the rare ability to leap from science to poetry and back, and—when he was not writing literature—did important work in anatomy, botany, and geology, coined the term “morphology,” and even managed to discover a new bone in the human upper jaw. Goethe wrote that all individual organisms have universal tendencies, to transform themselves, to expand and contract, to divide and unite, to arise and vanish, and he claimed to have traced “the manifold specific phenomena in the magnificent garden of the universe back to one simple general principle.”

After Darwin, natural historians saw the reconstruction of life’s tree as their most important task, scrutinizing the details of shape in adult animals and embryos, the number of rays in a fin, of rows of scales, to deduce the degree of relation. From these, they drew up careful family descriptions, leaving little doubt that fish, amphibians, reptiles, birds, and mammals all descended from a common ancestor. But it would take another century, and a bevy of bright, restless scientists with minds full of physics and with pluck on their side, to unmask the molecular likeness at the heart of life. Strung through all organisms was a single genetic thread made of the same molecular stitches. The difference between a bacterium and a bullfrog lay largely in the order and the sequence of those stitches as well as their total number.

So it was true. The whole code of nature could be written on a thumbnail. Compound it how you will, salamander, German philosopher, algal mat, ginkgo tree, it is but one stuff, the eye of the needle through which all life passes. “Nature uses only the longest threads to weave her patterns,” wrote the late physicist Richard Feynman, “so each small piece of her fabric reveals the organization of the entire tapestry.”

The findings of the last few decades have made this fact more urgent. Among the genes for tune deafness and hairy palms in McKusick’s masterly catalogue are genes for the making of cytochrome C, crystallin, ubiquitin, Hox proteins, and other useful molecules, found not just in members of the human family but in nearly all organisms: worm, ladybird, siskin. When scientists learned to read genes and compare them in separate organisms, their really big shock came on finding the easy way genes from vastly different creatures fell into families, with sequences of stitches so similar that they had to be of common ancestry. These small shared sequences were like family earmarks as distinctive as the square stem of the mint family.

If a gene has endured almost intact for millions of years in so diverse a panoply of creatures, it likely serves a vital purpose; disable that gene, and the consequences may be catastrophic. Scientists recently scratched around in the yeast genome for sequences like those in certain human genes that, when mutated, are known to cause disease. They found that one in four of these human genes matched a yeast gene, including one involved in cystic fibrosis. And listen to this, William Blake and John Clare: of the 289 known human “disease” genes, 177 have direct counterparts in the fruit fly. (This is good news for research on disease. When scientists find a gene in a worm or a fly that matches a human gene, they can study that gene and its functions more easily in the simpler organism than they can in humans, whose genomes are much more complicated.)

Accepted wisdom had it that genes were unique and idiosyncratic, peculiar to particular species. But now it seems that many are close relatives in one degree or another, belonging to one of a few thousand families. Genes shared by the widest range of organisms are probably modern versions of life's oldest genes. Suddenly it's possible for scientists to draw up life's evolutionary tree, to sort out the relations among modern creatures and their distant ancestors, not on the loose basis of appearance—the shapes of leaves and fins, the color of feathers, which are often deceptive—but with tight molecular precision. By drawing the family trees of genes in modern forms of life and running them backward to the genes at the root of the tree, they may even define the nature of the universal ancestor from which all life sprang.

CHAPTER 6 : A NEW CENTURY

Reading Assignment 1 (THE AMERICAN PEOPLE FACE A NEW CENTURY - PART 1)

Reading Selection 1 (P. 261)

More than two hundred years old as the twenty first century began, the United States was both an old and a new nation. It boasted one of the longest uninterrupted traditions of democratic government of any country on earth. Indeed, it had pioneered the techniques of mass democracy and was, in that sense, the oldest modern polity. As one of the earliest countries to industrialize, America had also dwelt in the modern economic era longer than most nations.

But the Republic was in many ways still youthful as well. innovation, entrepreneurship, and risk taking—all characteristics of youth—were honored national values. The twenty-first century began much like the twentieth, with American society continuing to be rejuvenated by fresh waves of immigrants, full of energy and ambition. The U.S. economy, despite problems, was generating new jobs at a rate of some 2 million per year. American inventions, especially computer and communications technologies, were transforming the face of global society. The world seemed to worship the icons of American Culture—downing soft drinks and donning blue jeans, watching Hollywood films, listening to rock or country and western music, even adopting indigenous American sports like baseball and basketball. In the realm of consumerism, American products appear to have Coca-Colonized the globe.

The history of American society also seemed to have increased global significance as the third millennium of the Christian era opened. Americans were a pluralistic people who had struggled for centuries to provide opportunity and to achieve tolerance and justice for many different religious, ethnic , and racial groups. Their historical experience could offer valuable lessons to the rapidly internationalizing planetary society that was emerging at the end of the twenty-first century.

In politics, economics, and culture, the great social experiment of American democracy was far from completed as the United States faced its future. Much history remained to be made as the country entered its third century of nationhood. But men and women make history only within the framework bequeathed to them by earlier generations. For better or worse, they march forward along time's path bearing the burdens of the past. Knowing when they have come to a truly new turn in the road, when they can lay part of their burden down and when they cannot, or should not—all this constitutes the sort of wisdom that only historical study can engender.

Economic Revolutions

When the twentieth century opened, United States Steel Corporation was the flagship business of America's booming industrial revolution. U.S. Steel was a typical "heavy industry," cranking out the ingots and girders and sheet metal that built the nation's basic physical infrastructure. A generation later, General Motors, annually producing millions of automobiles, became the characteristic American corporation, signaling the historic shift to a mass consumer

economy that began in the 1920s and flowered fully in the 1950s. Following World War II, the rise of International Business Machines (IBM) symbolized yet another momentous transformation, to the fast-paced “information age,” when the storing, organizing, and processing of data became an industry in its own right.

The pace of the information age soon accelerated. By century’s end, the rapid emergence of Microsoft Corporation and the phenomenal growth of the Internet heralded an explosive communications revolution. Americans now rocketed down the “information superhighway” toward the uncharted ed terrain of an electronic global village, where traditional geographic, social, and political boundaries could be vaulted with the tap of a keypad.

The communications revolution was full of both promise and peril. In the blink of an eye, ordinary citizens could gain access to information once available only to privileged elites with vast libraries or expert staffs at their disposal. Businesspeople instantaneously girdled the planet with transactions of prodigious scope and serpentine complexity. Japanese bankers might sell wheat contracts in Chicago and simultaneously direct the profits to buying oil shipments from the Persian Gulf offered by a broker in Amsterdam. By the late 1990s, a “dot-corn” explosion of new commercial ventures quickly expanded the market (and the stock-market stakes) for entrepreneurs leading the way in making the Internet a twenty-first-century electronic mall, library, and entertainment center rolled into one.

But the very speed and efficiency of the new communications tools threatened to wipe out entire occupational categories. Postal delivery people, travel agents, store clerks, bank tellers, stockbrokers, and all kinds of other workers whose business it was to mediate between product and client, might find themselves rendered obsolete in the era of the Internet. And as the computer makes possible “classrooms without walls,” where students can pursue learning largely on their own, even teachers, whose job is essentially to mediate between students and various bodies of knowledge, might well end up as road kill on the information superhighway.

Increasingly, scientific research was the engine that drove the economy, and new scientific knowledge posed new social and moral dilemmas. When scientists first unlocked the secrets of molecular genetic structure in the 1950s, the road lay open to breeding new strains of high-yield, pest and weather resistant crops; to curing hereditary disease; and also, unfortunately, to unleashing genetic mutations that might threaten the fragile ecological balance of the wondrous biosphere in which humankind was delicately suspended. As technical mastery of biological and medical techniques advanced, unprecedented ethical questions clamored for resolution. Should the human gene pool itself be “engineered”? What principles should govern the allocation of human organs for lifesaving transplants, or of scarce dialysis machines, or of artificial hearts? Was it wise in the first place to spend money on such costly devices rather than devote society’s resources to improved sanitation, maternal and infant care, nutritional and health education? Who was the rightful parent of a child born to a “surrogate mother” or conceived by artificial insemination? How, if at all, should society regulate the increasingly lengthy and often painful process of dying? What rules should guide efforts to clone human beings, or should such efforts even be attempted?

Affluence and Inequality

Americans were still an affluent people at the beginning of the twenty-first century. Median household income declined somewhat in the early 1990s but rebounded by 1998 to about \$39,000. Yet even those Americans with incomes below the government’s official poverty level (defined in 1998 as \$16,600 for a family of four) enjoyed a standard of living higher than that of two-thirds of the rest of human kind.

Two Nations?

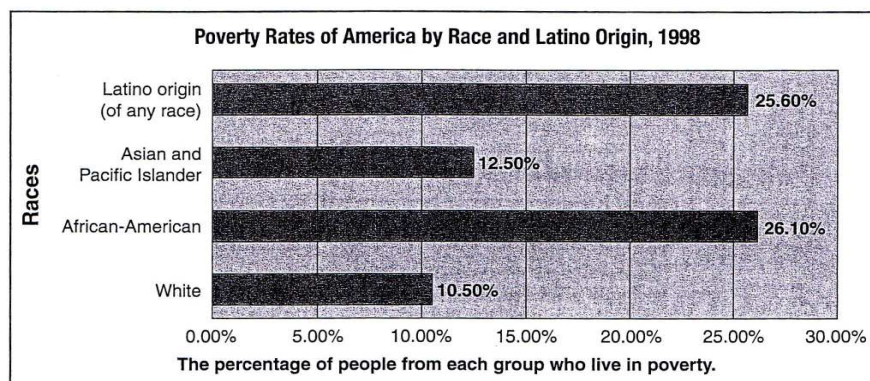
While decaying neighborhoods and the sad legions of the homeless blighted American urban life in the closing decades of the twentieth century, affluent Americans took refuge in gated communities like this one in the Brentwood section of Los Angeles.

Americans were no longer the world's wealthiest people in the 1990s, as they had been in the quarter century after World War II. Citizens of several other countries enjoyed higher average per capita incomes, and many nations boasted more equitable distributions of wealth. In an unsettling reversal of long-term trends in American society, during the last two decades of the twentieth century, the rich got much richer, while the poor got an ever-shrinking share of the pie. The richest 20 percent of Americans in the 1990s raked in nearly half the nation's income, whereas the poorest 20 percent received less than 4 percent. The gap between rich and poor began to widen in the 1980s and widened further in the following decade. That trend was evident in many industrial societies, but it was most pronounced in the United States. Between 1968 and 1998, the share of the nation's income that flowed to the top 20 percent of its households swelled from 40 percent to more than 49 percent. Even more striking, in the same period the top 5 percent of income earners saw their share of the national income grow from about 15 percent to more than 20 percent. The Welfare Reform Bill of 1996, restricting access to social services and requiring able-bodied welfare recipients to find work, weakened the financial footing of many impoverished families still further.

Widening Income Inequality

Share of aggregate income	1980	1990	1999
Lowest fifth	4.3	3.9	3.6
Second fifth	10.3	9.6	8.9
Middle fifth	16.9	15.9	14.9
Fourth fifth	24.9	24.0	23.2
Highest fifth	43.7	46.6	49.4
lop 5%	15.8	18.6	21.5

Widening inequality could be measured in other ways as well: chief executives in the 1970s typically earned forty-one times the income of the average worker in their corporations; by the 1990s they earned 225 times as much. At the same time, some 34 million people, 12.7 percent of all Americans (10.5 percent of whites, 26.1 percent of African-Americans, and 25.6 percent of Latinos), remained mired in poverty, a depressing indictment of the inequities afflicting an affluent and allegedly egalitarian republic.



What caused the widening income gap? Some critics pointed to the tax and fiscal policies of the Reagan and Bush years, which favored the wealthy and penalized the poor. But deeper-running historical currents probably played a more powerful role, as suggested by the similar experiences of other industrialized societies. Among the most conspicuous causes were intensifying global economic competition; the shrinkage in high paying manufacturing jobs for semiskilled and unskilled workers; the greater economic rewards commanded by educated workers in high-tech industries; the decline of unions; the growth of part-time and temporary work; the rising tide of relatively low skill immigrants; and the increasing tendency of educated men and women to marry one another and both work, creating households with very high incomes.

Reading Assignment 2 (THE AMERICAN PEOPLE FACE A NEW CENTURY - PART 2)

Reading Selection 2 (P. 277)

Ethnic Pride

Thanks both to continued immigration and to their own high birthrate, Hispanic-Americans were becoming an increasingly important minority. The United States by the late 1990s was home to more than 31 million Hispanics. They included some 21 million Chicanos, or Mexican-Americans, mostly in the Southwest, as well as 3 million Puerto Ricans, chiefly in the Northeast, and more than 1 million Cubans in Florida (where it was jokingly said that Miami had become the most “Anglo” city in Latin America).

Flexing their political muscles, Latinos elected mayors of Miami, Denver, and San Antonio. After years of struggle, the United Farm Workers Organizing Committee (UFWOC), headed by the soft-spoken and charismatic Caesar Chavez, succeeded in improving work conditions for the mostly Chicano “stoop laborers” who followed the cycle of planting and harvesting across the American West.

Hispanic influence seemed likely to grow, as suggested by the increasing presence of Spanish-language ballots and television broadcasts. Hispanic-Americans, newly confident and organized, were destined to become the nation’s largest ethnic minority, out-numbering even African-Americans, in the early twenty-first century. Indeed, by the first decade of the new century, the Chicano population of America’s [most populous] state, California, equaled the Anglo population, making the state a patchwork of minorities with no single ethnic majority.

Asian-Americans also made great strides. By the 1980s they were America’s fastest-growing minority. Their numbers nearly doubled in that decade alone, thanks to heavy immigration, and continued to swell in the 1990s. Once feared and hated as the “yellow peril” and relegated to the most menial and degrading jobs, citizens of Asian ancestry were now counted among the most prosperous and successful of Americans—a “model minority.” The typical Asian-American household enjoyed an income nearly 20 percent greater than that of the typical white household. In 1996 the voters of Washington elected the first Asian-American to serve as governor of a mainland American state.

Indians, the original Americans, shared in the general awakening of ethnic and cultural pride. The 2000 census counted some 2.4 million Native Americans, half of whom had left their reservations to live in cities. Meanwhile, unemployment and alcoholism had blighted reservation life. Many tribes tried to take advantage of their special legal status as independent nations by opening bingo halls and gambling casinos for white patrons on reservation lands, but the cycle of discrimination and poverty proved hard to break.

Minority America

Racial and ethnic tensions also exacerbated the problems of American cities. These stresses were especially evident in Los Angeles, which, like New York a century earlier, was a magnet for minorities, especially immigrants from Asia and Latin America. When in 1992 a mostly white jury exonerated white Los Angeles police officers who had been videotaped ferociously beating a black suspect, the minority neighborhoods of South Central Los Angeles erupted in rage. Arson and looting laid waste entire city blocks, and scores of people were killed. In a sobering demonstration of the complexity of modern American racial rivalries, many black rioters vented their anger at the white police and the judicial system by attacking Asian shopkeepers, who in turn formed armed patrols to protect their property.

The Los Angeles riots vividly testified to black skepticism about the American system of justice. Just three years later, again in Los Angeles, the gaudy televised spectacle of former football star O. J. Simpson's murder trial fed white disillusionment with the state of race relations. After months of testimony that seemed to point to Simpson's guilt, the jury acquitted him, presumably because certain Los Angeles police officers involved in the case had been shown to harbor racist sentiments. In a later civil trial, another jury unanimously found Simpson liable for the "wrongful deaths" of his former wife and another victim. The reaction to the Simpson verdicts revealed the yawning chasm that separated white and black America, as most whites continued to believe Simpson guilty, while a majority of African-Americans told pollsters that the original not-guilty verdict was justified. African-American charges that they had been unlawfully kept from the polls during the 2000 presidential election in Florida convinced many blacks that they were still facing a Jim Crow South of black disenfranchisement.

American cities have always held an astonishing variety of ethnic and racial groups, but in the late twentieth century, minorities made up a majority of the population of many American cities, as whites fled to the suburbs. More than three-quarters of African-Americans lived in cities by the 1990s, whereas only about one-quarter of whites did. The most desperate black ghettos, housing a hapless "underclass" in the inner core of the old industrial cities, were especially problematic. Successful blacks who had benefited from the civil rights revolution of the 1950s and 1960s followed whites to the suburbs, leaving a residue of the poorest poor in the old ghettos. Without a middle class to sustain community institutions like schools and small businesses, the inner cities, plagued by unemployment and drug addiction, seemed bereft of leadership, cohesion, resources, and hope.

The friendless underclass, heavily composed of blacks and other minorities, represented a sorry and dangerous social failure that eluded any known remedy. But other segments of the African-American community had clearly prospered in the wake of the civil rights gains of the 1950s and 1960s, though they still had a long hill to climb before reaching full equality. By the 1990s about 40 percent of blacks were counted in the middle class (defined as enjoying family income greater than \$25,000 per year). The number of black elected officials had risen above the seven thousand mark, including more than a thousand in the Old South, some two dozen members of Congress, and the mayors of several large cities. Voting tallies demonstrated that successful black politicians were moving beyond isolated racial constituencies and into the political mainstream by appealing to a wide variety of voters. In 1989 Virginians, only 15 percent of whom were black, chose L. Douglas Wilder as the first African-American elected to serve as a state governor. In 1994 voters in Illinois made Carol Moseley-Braun the first African-American woman elected to the U.S. Senate.

Single women headed over half of black families, almost three times the rate for whites. Many of those African-American women, husbandless and jobless, necessarily depended on welfare to feed their children. As social scientists increasingly emphasized the importance of the home environment for success in school, it became clear that many fatherless, impoverished African-American children seemed consigned to suffer from educational handicaps that were

difficult to overcome. Black youths in the 1990s still had about one year less schooling than whites of the same age and were less than half as likely to earn college degrees. As the American economy became ever more driven by new applications of computers and biotechnology, these disadvantages were bound to widen the racial gap of employment opportunity. The political assault against affirmative action in California and elsewhere only compounded the obstacles to advanced training for many young African-Americans.

Reading Assignment 3 (LIVING IN A DANGEROUS WORLD - AMERICA AND THE WORLD AFTER SEPTEMBER 11TH, 2001)

Reading Selection 3 (P. 288)

On September 11, 2001, America's good luck apparently ran out. Out of a crystal-clear sky, suicidal terrorists slammed two hijacked airliners, loaded with passengers and jet fuel, into the twin towers of New York City's World Trade Center. They flew a third plane into the military nerve-center of the Pentagon, near Washington, D.C., killing 189 people. Heroic passengers forced another hijacked aircraft to crash in rural Pennsylvania, killing all 44 aboard but depriving the terrorists of a fourth weapon of mass destruction. As the two giant New York skyscrapers thunderously collapsed, some three thousand innocent victims perished, including peoples of many races and faiths from more than sixty countries, as well as hundreds of New York's police—and fire—department rescue workers. A stunned nation blossomed with flags, as grieving and outraged Americans struggled to express their sorrow and solidarity in the face of catastrophic terrorism.

The murderous events of that late-summer morning reanimated American patriotism. They also dramatically ended an historical era. For nearly two centuries, the United States had been spared from foreign attack against its homeland. All but unique among modern peoples, that degree of national security had undergirded the values of openness and individual freedom that defined the distinctive character of American society. Now American security and American liberty alike were imperiled.

President Bush responded with a sober but stirring address to Congress nine days later. His solemn demeanor and the gravity of the situation helped to dissipate the cloud of illegitimacy that had shadowed his presidency since the disputed election of 2000. Warning that the struggle against terrorism would be long and messy, he pledged “we will not tire, we will not falter, and we will not fail” until “we bring our enemies to justice, or bring justice to our enemies.” While emphasizing his respect for the Islamic religion and Muslim peoples, he identified the principal enemy as Osama bin Laden, head of a shadowy terrorist network known as Al Qaeda (“the base” in Arabic). A wealthy extremist exiled from his native Saudi Arabia, bin Laden was associated with earlier attacks on American embassies in East Africa and on a U.S. Naval vessel in Yemen. He had taken refuge in land-locked Afghanistan, ruled by Islamic fundamentalists-called the Taliban. (Ironically, the United States had indirectly helped bring the Taliban to power, when it supported religious rebels resisting the Soviet invasion of Afghanistan in the 1980s.) Bin Laden was known to harbor bitter resentments toward the United States for its economic embargo against Saddam Hussein's Iraq, its military presence on the sacred soil of the Arabian peninsula, and its support for Israel's hostility to Palestinian nationalism. Bin Laden also fed on world-wide resentment of America's enormous economic, military, and cultural power. Ironically, America's most conspicuous strengths had made it a conspicuous target.

The American Prospect in the Age of Terrorism

When the Taliban refused to hand over bin Laden, Bush ordered a massive military campaign against Afghanistan. Within three months, American and Afghani rebel forces had

overthrown the Taliban and were poised to flush bin Laden out of the fortified underground sanctuary where he was believed to have holed up.

The campaign in Afghanistan impressively demonstrated the wallop and sophistication of American air power and “smart,” precision-guided munitions. But it remained an open question whether in the longer run America’s high-tech arsenal would prove effective against foes so elusive, zealous, and determined—foes who sought not simply to destroy the United States but to demoralize it, perhaps to corrupt its very soul. Behind bin Laden lurked countless terrorist “cells” in several dozen countries, some of them possibly in possession of biochemical or even nuclear weapons. Some alarmed critics even warned that the events of September 11 heralded the onset of a protracted clash of civilizations, pitting millions of Muslims desperate to defend their traditional faith and culture against the relentlessly modernizing forces of the western world, spearheaded by the United States. Confronted with this unconventional, diffuse menace, anti-terrorism experts called for new tactics of “asymmetrical warfare,” employing not just traditional military muscle, but innovative intelligence-gathering, economic reprisals, infiltration of suspected organizations, and even assassinations. The new war against terror also compelled the Bush administration to back away from the unilateralist foreign policies it had pursued in its early months and seek anti-terrorist partners around the globe, as evidenced by the surprisingly warm relationship that emerged after September 11 between the United States and its former adversary, Russia.

The terrorists' blows diabolically coincided with onset of a recession. The already gathering economic downdraft worsened as edgy Americans shunned air travel and the tourist industry withered. Then, while the rubble in New York was still smoldering, a handful of Americans died after receiving letters contaminated with the deadly respiratory disease, anthrax. The gnawing fear spread that biological warfare would be the next threat facing the American people.

In the anxious atmosphere, Congress rammed through the USA-Patriot Act, permitting extensive telephone and e-mail surveillance, and authorizing the detention and deportation of immigrants suspected of terrorism. The Justice Department meanwhile rounded up hundreds of immigrants and held them without habeas corpus (formal charges in an open court). The Bush administration further called for trying suspected terrorists before military tribunals, where the usual rules of evidence and procedure did not apply. Public opinion polls showed Americans sharply divided on whether the terrorist threat fully warranted such drastic encroachments on America’s ancient traditions of civil liberties.

Catastrophic terrorism posed an unprecedented challenge to the United States, but the world's oldest republic remained resilient and resourceful. Born as a revolutionary force in a world of conservatism, the United States had emerged in the twentieth century as a conservative force in a world of revolution. It held aloft the banner of liberal democracy in a world wracked by revolutions of the right and left, including fascism, Nazism, and communism. Yet through it all, much that was truly revolutionary also remained a part of America’s liberal democratic heritage, as its people pioneered in revolutions against colonialism, racism, sexism, ignorance, and poverty.

The terrorist threat reminded Americans of the urgency of resolving the ethnic and cultural conflicts that continued to plague the planet after the Cold War's end-and of the urgency of making America's own character better understood around the world. Americans still aspired to live up to Lincoln's prediction that they and their heritage represented “the last best hope of earth”—but in the twenty-first century they would have to work harder than ever to prove it, to themselves as well as to others.